

ABSTRACT OF THE DISCLOSURE

5 A vaccine including recombinant vaccinia virus (ATCC VR-1354) having
an inserted gene for coding glutamic acid decarboxylase is used for preventing
type 1 diabetes mellitus. The glutamic acid decarboxylase expressed from the
recombinant virus suppresses or tolerizes the autoreactive T cell, and induces
immunological tolerance, thus effectively prevents or delays the development of
type 1 diabetes mellitus.